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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,064	02/20/2004	Steven E. Brown	5720	6305

7590 01/18/2006  
Milliken & Company  
P.O. Box 1927  
Spartanburg, SC 29304

EXAMINER

KHAN, AMINA S

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/783,064

Applicant(s)

BROWN ET AL.

Examiner

Amina Khan

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>07/29/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,2,8-12,18-22,28-32 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (US 6,953,299) in view of Kasprzak (US Patent 4,685,930) and Froehlich et al. (US Patent 3,910,848) and further in view of Moore et al. (US Patent 4,908,149).

The primary reference of Wang et al. teaches methods of cleaning textiles, specifically carpets, as claimed in claims 9,19,29,39 and 44, by using a cleaning machine, as claimed in claims 8,18,28 and 38, illustrated below the abstract. Wang teaches methods where the user of the machine presses a trigger, as claimed in claims 2,12,22 and 32, which allows the pressurized cleaning fluid to be released from a nozzle through an aperture and ultimately onto the surface to be cleaned (column 5, lines 25-31). Wang further teaches that when cleaning large moderately soiled carpet areas, the user pushes down on a cleaning head, made of bristles, and scrubs spots and stains (column 14, lines 29-39) whereby loosening soil, dirt and other debris from the carpet fibers (column 13, lines 6-13) after which the debris may be removed (column 13, lines 24-25) as claimed in claim 1.

Wang further teaches cleaning compositions comprising less than 99% water (column 14, lines 63 and 64), surfactants (column 15, line 64 to column 20, line 17), 0.1-25% C<sub>1-4</sub> alkanols such as methanol, ethanol, and propanol, 0.1-25% polyalkylene glycols (column 20, lines 21-31), thickeners chosen from polyacrylic acid, xanthan gum, and clays (column 21, lines 9-12), film forming polymers chosen from starch, polyvinyl alcohol, and polyacrylic acid (column 22, lines 65-67; column 23, lines 1-2), dipropylene glycol (column 23, line 23), which meets the claimed limitation of polyoxyalkylene material as claimed in claims 11,21 and 31, and 0.01-5% stain resist agents chosen from homopolymers and copolymers of methacrylic acid (column 23, lines 62-64; column 24, lines 2-3) as claimed in claims 1,11,21,31 and 41.

Wang further teaches the cleaning compositions are dispensed from aerosol containers equipped with nozzles with orifices (column 12, lines 53-56) from which a fan-shaped spray pattern of fluid is delivered (column 10, lines 62-67; column 11, lines 1-7). The canisters comprise caps (column 11, lines 63-67; column 12, lines 1-52).

Wang is silent as to the concentrations of thickeners, film forming polymers, and dipropylene glycol. Wang does not teach urea formaldehyde polymers of the claimed particle sizes and oil absorption values, surface tension values of 40 dynes per centimeter, and the treatment of upholstery or fabric.

The secondary reference of Kasprzak, in the analogous art of carpet cleaning methods, teaches compositions comprising 5-40% urea-formaldehyde polymer particles as described in US Patent 3,910,848 (column 4, lines 16-21), and 0-50% polyacrylic acid or starch (column 4, line 68; column 5, lines 1-5), and 30-70% any conventional

Art Unit: 1751

cleaning solvent having a boiling point below 250°C (column 3, lines 55-57), which may be used to clean carpet, fabrics or upholstery (column 5, lines 50-53). The secondary reference of US Patent 3,910,848, teaches urea-formaldehyde particles with particle sizes of 10-105 microns and oil values of at least 90 (column 1, lines 39-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the urea-formaldehyde polymers at the percentages taught by Kasprzak into the carpet cleaning compositions taught by Wang because Kasprzak teaches the utility of these polymers as carpet cleaning agents. It is prima facie obvious to combine two compositions, each taught for the same purpose, to yield a third composition for that very purpose. In re Kerkhoven, 205 USPQ 1069, In re Pinten, 173 USPQ 801, and In re Susi 169 USPQ 423. It would also have been obvious to one of ordinary skill in the art to apply the compositions claimed by Wang to treat upholstery and fabrics because Kasprzak teaches the treatment of upholstery and fabrics with similar compositions (isopropanol, butanol, surfactants, polyacrylic acids, starch). It would also have been obvious to one of ordinary skill in the art to use the optimize the concentrations of polyacrylic acid or starch and dipropylene glycol (a conventional cleaning solvent with a boiling point of 231°C) in the compositions taught by Wang to the percentages taught by Kasprzak because Kasprzak teaches that these percentages are effective in removing soils from carpets.

The secondary reference of Moore et al., in the analogous art of carpet cleaning methods, teaches cleaning compositions comprising water containing sufficient surfactant to lower the surface tension to below 40 dynes per centimeter (column 2,

Art Unit: 1751

lines 64-68), C<sub>1-4</sub> aliphatic alcohols (column 6, lines 38-40), urea-formaldehyde resins with particle sizes of 37-105 microns (column 8, lines 14-32). ). It would have been obvious to one of ordinary skill in the art to optimize the surface tension of water with surfactant in the compositions taught by Wang to the values taught by Moore because Moore teaches that these values result in improved cleaning properties (column 2, lines 64-68).

Claims 3-7,13-17,23-27,33-37 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (US 6,953,299) in view of Kasprzak (US Patent 4,685,930) and Froehlich et al. (US Patent 3,910,848) and of Moore et al. (US Patent 4,908,149) and in further view of shoplet.com (<http://www.biochem.ucl.ac.uk/bsm/enzymes/ec3/ec01/ec01/ec0074/index.html>) and Hoxie (US Patent 3,184,781).

The references of Wang et al., Kasprzak, Froehlich et al. and Moore et al. are relied upon as set forth above. The prior art do not teach dispensing containers with removable caps, synthetic applicator tips made of bristles or foam with openings and volumes of less than 1 gallon.

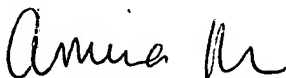
The secondary reference of shoplet.com is included to demonstrate that carpet cleaners currently on the market, such as Resolve® Spot Magic®, are conventionally sold in aerosol cans with detachable caps, nozzles with openings, and canisters with a volume of less than 1 gallon (in this case 14 oz). Furthermore Hoxie, in the analogous art of upholstery shampooers (column 2, lines 7-9), teaches attachable heads for aerosol cans (column 1, lines 23-25), which have bristles and sponge foams (column 3,

lines 6-73). It would have been obvious to one of ordinary skill in the art to incorporate the cleaning solutions taught by Wang et al., Kasprzak, Froehlich et al. and Moore et al. into the canisters demonstrated by shoplet.com with the cleaning heads of Hoxie attached for dispensing since this is conventionally known in the art to be an effective method for packaging.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amina Khan whose telephone number is (571) 272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Amina Khan, PhD  
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January 5, 2005



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